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**Appendix H**  
**City of Chula Vista**  
**March 18, 2003 City Council Agenda Statement**  
**Regarding Current Sewerage Capacity Charge**

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## DISCUSSION:

### Background

The Sewerage Capacity Charge is paid by the owner or person applying for a permit to develop or modify the use of any residential, commercial, industrial or other property, which is projected by the City Engineer to increase the volume of flow in the City's sewer system by at least one-half of one Equivalent Dwelling Unit of flow.

Prior to 1985, the City of Chula Vista was one of the very few agencies, which did not impose a charge against new construction for sewage treatment and trunk sewer capacity. Capacity in such facilities was characteristically provided at public expense and the City typically allowed a wide degree of latitude for community development.

In March of 1985, the Engineering Department prepared a Study titled "*Sewerage Facility Participation Fee Study-Modified March 1985*" (Attachment 1). The purpose of this study was to investigate the feasibility of establishing a capacity fee that would be applicable to all new sewer connections to the City's sewer collection system. This study recommended among other things, the establishment of a Sewerage Participation fee that would be adjusted on an annual basis to reflect changes in construction costs (suggested basis - Engineering News Record Construction Index most applicable to July 1 of each year).

Subsequently, on April 2, 1985, Council approved Ordinance No. 2107, which established the Sewerage Facility Participation Fee, now referred to as the Sewerage Capacity Charge, to enable the citizenry to be repaid for their initial investment and to facilitate the development of Chula Vista. At that time the fee was set to be \$300 per Equivalent Dwelling Unit (EDU).

Two years later, in anticipation of the significant costs of upgrading the Point Loma Wastewater Treatment Plant to a secondary treatment facility, for which the City of Chula Vista, as well as other participating agencies was liable, Council on May 5, 1987, approved Resolution No. 13004 and Ordinance No. 2002 increasing the Sewerage Participation Fee from \$300 to \$600.

In 1989, following the adoption of the Clean Water Act, the Environmental Protection Agency (EPA) directed the City of San Diego to upgrade the Point Loma Treatment Plant to a Secondary Treatment facility. Since Federal funds were not anticipated to be available for the required upgrades at that time, and the cost of bringing the Plant into compliance appeared to be far greater than what was originally anticipated in 1987, Council, on October 17, 1989 approved Resolution Nos. 15352 and 15352A. These Resolutions increased the Sewerage Participating Fee to \$2,000, pending the completion of various studies being conducted at that time to determine the full impacts/costs of upgrading the treatment plant.

One year later, on October 9, 1990, Council, by Resolution 15894, further increased the Sewer Participation Fee to \$2,220 to enable the City meet its obligation to the Metro System for the upgrade of the treatment plant. The Resolution further recommended that the Sewerage Capacity Charge be increased annually by 11% for a period of 8 to 10 years thereafter. This recommendation was made in anticipation of future expenditures that might have been incurred by the Metro system to comply with EPA regulations.



Since then, although the original study which established the fee and subsequent Council actions had recommended that the City update the fee annually to reflect the increase in capacity, improvements, maintenance and operation costs, this was not done due to a variety of reasons.

#### Need for the Update of the Sewerage Capacity Charge

As stated in Section 3.14.010 of the City of Chula Vista Municipal Code, all revenue derived from the Sewerage Capacity Charge is deposited in the Trunk Sewer Capital Reserve Fund. The Trunk Sewer Capital Reserve Fund is used solely for the following purposes, unless the City Council vote to appropriate such funds for other purposes; provided such other purposes are for the planning, design, or construction of sewage collection or treatment or water reclamation purposes or incidental thereto:

1. Paying all or any part of the cost and expense to enlarge sewer facilities of the City so as to enhance efficiency of utilization and/or adequacy of capacity in order to effectively serve the needs of the City;
2. Paying all or any part of the cost and expense to plan and/or evaluate any future proposals for area-wide sewage treatment and/or water reclamation systems or facilities.

Therefore, revenue derived from the Sewerage Capacity Charge is primarily used to provide capacity both for conveyance and treatment.

The City of Chula Vista currently has 19.843 million gallons per day (MGD) of sewage treatment capacity rights within the Metro system; however, the City currently generates approximately 16.5 MGD of sewage. In the last few years, the City has experienced a significant amount of growth, and as the flow generation continues to increase, it is imperative that the City be proactive in planning for the acquisition of additional capacity rights within the Metro system to sustain the City to buildout conditions.

More specifically, this increase of the Sewer Participation Fee is needed for the following reasons:

#### 1. Acquisition of additional Capacity Rights

The existing capacity in the Metro system was originally acquired with funds generated by the Sewerage Capacity Charge that existing residents paid when they made their connection to the City's sewer system. If reserve capacity in the Metro sewer system had not been purchased, new residents would either not be permitted to connect, or would have been required to pay for the acquisition of additional treatment capacity. Instead, new residents are permitted to connect to the system and make use of the reserve capacity held by the City. Recent projections of the City's future sewage generation and treatment needs indicate that it will soon be necessary for the City to acquire additional capacity rights in the Metro Sewage System.



2. Annual Increase in Metropolitan Sewerage System Costs

The City of Chula Vista is responsible for the operation and maintenance of the local collection system. Wastewater generated from the City is discharged into the Metro system and conveyed to the City of San Diego's Point Loma Wastewater Treatment Plant for handling. In accordance with the terms of the Metro Agreement, the City of Chula Vista pays for the treatment of the wastewater based on the quantity and quality of the generated sewage.

Comparing the City of Chula Vista's Metro expenditure during the Fiscal Year when the last Sewerage Capacity Charge increase occurred to the current Fiscal Year, we see that the wastewater treatment costs had increased significantly. The Metro costs include costs for operations and maintenance, capital improvement project expenditure and related debt financing. The capital costs ultimately impact the Sewer Capacity Fee. In Fiscal Year 1990, the City's overall Metro expenditure for sewage treatment for approximately 13 MGD was \$4,474,545. More recently, for Fiscal Year 2002, the City's total Metro expenditure for the treatment of 15.3 MGD of sewage was \$11,600,242 (See Attachment No. 2). The following table shows these expenditures.

FISCAL YEAR	SEWAGE (MGD)	EXPENDITURE
1990	13	\$ 4,474,545
2002	15.3	\$11,600,242
INCREMENT FROM FY 1990 TO FY 2002	2.3	\$ 7,125,697

3. Increase in the Need for Improvements Created by the Demand for More Capacity in the Sewer System

The surge of development and the proportionate increase in the demand for wastewater services during recent years has necessitated that the City invest in various improvements to the existing infrastructure. The cost of some of these improvements varied significantly from what was originally estimated. For example, the Salt Creek Gravity Sewer Interceptor which the City partially funded utilizing the Trunk Sewer Capital Reserve Funds ultimately cost approximately \$12 Million Dollars more than was originally budgeted. City Council, on August 13, 2002 passed Resolution 2002-297 appropriating funds from the Trunk Sewer Capital Reserve Fund to finance the Salt Creek Gravity Sewer Interceptor project. In addition, the Telegraph Canyon Trunk Sewer was also improved utilizing approximately \$2.2 Million Dollars of Trunk Sewer Funds, which was not originally contemplated.

The City recently retained PBS&J to update the City's Wastewater Master Plan. The primary goal of the Wastewater Master Plan Update is to evaluate the adequacy of the existing wastewater collection system to sustain the long-term growth of the City. The plan will assist the City in budgeting for Capital Improvement Projects (CIP), allocating resources for the acquisition of additional sewage capacity and determining the short and



long-term sewer capacity needs of the City. It is projected that the Master Plan will be completed by Fall 2003.


4. Inflation

PBS&J has also indicated that by not updating the Sewerage Capacity Charge in the past twelve years, the fee has not kept pace with inflation, therefore its ability to fund the construction of capital projects or the acquisition of additional sewerage capacity in the Metro system as it was originally intended, has been significantly reduced. This inflationary trend was considered back in 1984 when the Sewerage Capacity Charge was created, and to avoid it, an annual fee adjustment was recommended. The 1984 Study, suggested the Engineering News Record Construction Cost Index (ENR CCI) as the basis of the fee-adjustment mechanism, and recommended that the ENR CCI be applicable July of each year. The ENR Construction Cost Index is a monthly composite figure of the cost of various construction materials and labor costs as measured by Engineering News-Record Magazine. As such, it is a more accurate predictor of the effects of inflation on a typical construction project than the CPI or other measure of inflation.

Fee Determination

In addition to the Wastewater Master Plan, PBS&J, under a separate contract, is preparing a Wastewater Rate Study/Financial Plan/Revenue Program. It is anticipated that this study will be completed in the next few months. Nevertheless, based on the work already completed by PBS&J in the preparation of the Rate Study, and PBS&J's acquired experience as current financial advisers to the Metro Technical Advisory Committee (Metro TAC), the consultant recommends that the City immediately implement an increase of the Sewerage Capacity Charge utilizing the Construction Cost Index, pending the completion of both the Rate Study and the Wastewater Master Plan.

This recommendation (Attachment 4) is consistent with the recommendations made in the original study (1984, *Sewerage Facility Participation Fee Study-Modified March 1985*) that formed the basis of the fee. The following table shows the methodology utilized in determining the Sewerage Capacity Charge based on the ENR Index:

	
ENR Construction Cost Index for July 1990	4734
ENR Construction Cost Index for July 2002	6605
Increase in Index (6605 / 4734)	1.3952
Revised Fee (\$2,220 x 1.3952)	\$3,097
Recommended Fee	\$3,000
Net Increase (\$)	\$780

See Attachment 3 for supporting information regarding the ENR Construction Cost Indexes.



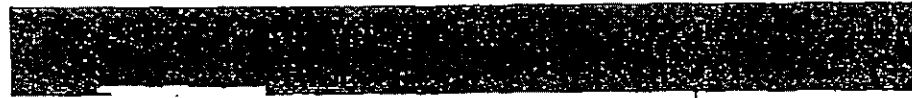
Comparison of City of Chula Vista's Sewerage Capacity Charge with Other Local Agencies

Most agencies in the area between Poway and the International Border collect some form of fee, which is used to defray some portion of the cost of existing sewerage facilities. Those fees are sometimes part of a larger fee covering specific work involved in making a physical connection to the sewer. Consequently, it is difficult to do a proper comparison of the proposed fee increase with those of other agencies.

The following table is a compilation of the fees charged by various agencies based on the *Wastewater User Charge Survey Report FY 2001-02*, completed by the State Water Resources Control Board on May 2002.

Rank	Agency	Charge per EDU
1	* Otay M. W. D.	\$0
2	* City of Imperial Beach	\$700
3	* Lemon Grove County Water District	\$1,000
4	City of Vista	\$1,922
5	* Alpine Sanitation District	\$2,000
5	* Lakeside Sanitation District	\$2,000
5	Pine Valley County Sanitation District	\$2,000
5	* Spring Valley Sanitation District	\$2,000
5	Winter Gardens Sewer Maintenance District	\$2,000
6	* City of Del Mar	\$2,004
7	* City of La Mesa	\$2,400
8	* City of National City	\$2,420
9	* City of San Diego	\$2,500
10	* City of Coronado	\$2,559
11	San Marcos (Vallecitos Water District)	\$2,650
12	City of Encinitas	\$2,680
13	Buena Sanitation District	\$3,000
13	* City of Chula Vista - (Proposed Fee)	\$3,000
13	* City of Poway	\$3,000
14	Cardiff Sanitation District	\$3,417
15	* City of El Cajon	\$3,472
16	City of Oceanside	\$3,793
17	Leucadia County Water District	\$3,950
18	Julian County Sanitation District	\$4,000
19	Fallbrook Public Utility District	\$4,264
20	City of Escondido	\$4,403





Rank	Agency	Charge per EDU
21	City of Solana Beach	\$4,500
22	Padre Dam M. W. D.	\$5,470
23	Rainbow M. W. D.	\$6,656
24	Rancho Santa Fe Community Service District.	\$7,800
25	Ramona Metropolitan Water District	\$6,125 / \$9,778

\* Participating Agency in the Metro System

#### Urgency Ordinance

The Urgency Ordinance will enable the City to collect the fee during the 60-day waiting period for the regular Ordinance to become effective. This Urgency Ordinance is only valid for 30 days therefore, it will be necessary to notice and hold further hearings in order to extend the Urgency Ordinance in 30-day increments until the permanent Ordinance becomes effective.

Staff recommends that the increase to the Sewerage Capacity Charge go into effect immediately by adopting the Urgency Ordinance. The urgent execution of the fee is needed in order to require all developments to pay their fair share of the cost of: purchasing additional sewage treatment capacity; constructing improvements to enhance the capacity of the City's sewer system and all other related costs or impacts to the collection system caused by their development.

Furthermore, immediate implementation of this fee is necessary due to the current and immediate threat to public safety, which will result, should there be a shortfall in funds required to pay for the required improvements to the wastewater collection system and to purchase additional sewage treatment capacity. The prospect of a deficit, inadequate sewage treatment capacity necessary for the continuation of development within the City, and concerns about an increased charge to remaining property owners, constitutes a current immediate threat to the public health, welfare and safety justifying the immediate increase of this fee.

#### Environmental Impact

The Environmental Review Coordinator has reviewed the proposed activity for compliance with the California Environmental Quality Act (CEQA) and has determined that the activity is not a "Project" as defined under Section 15378 of the State CEQA Guidelines; therefore, pursuant to Section 15060(93) of the State CEQA Guidelines the activity is not subject to CEQA. Thus, no environmental review is necessary.

**FISCAL IMPACT:** It is estimated that over the next eight months that this fee will be in effect prior to the anticipated adoption of the Wastewater Master Plan, it will result in additional revenues of \$1,560,000 (assuming that 2,000 permits are approved over this period). If this



Ordinance is not implemented, this revenue will be lost; thereby necessitating additional increases at the conclusion of the study beyond what the final recommendation would have been. The Trunk Sewer capital Reserve Fund currently has an unappropriated balance of approximately \$15.1 Million Dollars.

- Attachment 1: *Sewerage Facility Participation Fee Study-Modified March 1985, September 1984, City of Chula Vista Engineering Department.*
- Attachment 2: *"Table 1, City of Chula Vista Cost Allocation FY 1990-91" from the 1991 City of Chula Vista Wastewater Rate Plan and Revenue Program; and the FY 2002 fourth quarter invoice for the Metropolitan Sewerage System service.*
- Attachment 3: *Construction Cost Index History, Engineering News-Record (ENR)*
- Attachment 4: *PBS&J's letter recommending an interim increase to the Sewerage Capacity Charge*

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# ATTACHMENT 1

## SEWERAGE FACILITY PARTICIPATION FEE STUDY

SEPTEMBER 1984

(MODIFIED MARCH 1985)

### ENGINEERING DEPARTMENT

Prepared By: William E. Harshman

Reviewed and Approved By:

*John A. Tipton*  
City Engineer

Date: 10-2-82

Modifications Approved: 3/11/85

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## I. PURPOSE

It is the purpose of this report to summarize an investigation into the feasibility of developing a sewerage facility participation (capacity) fee applicable to all new sewer connections, and to make recommendations concerning the magnitude and character of the fee to be charged.

## II. RECOMMENDATION

It is recommended that:

- A. The City create a Sewerage Facility Participation Fee to be chargeable at time of permit issuance against all new connections to sewer and/or all modifications to existing connections and/or all land use changes where the volume of sewage generated is anticipated to increase by one-half of one Equivalent Dwelling Unit [EDU] or more.
- B. That the fee be based on a charge of \$300 per Equivalent Dwelling Unit for residential land uses and \$300 per each 265 gallons per day of sewage flow projected to be generated by land uses other than residential. Minimum charge in any instance is proposed to be \$150.
- C. ~~That such fees be adjusted annually to reflect any change in the Consumer Price Index for All Urban Consumers, San Diego, California, published by the Bureau of Economic Analysis, U.S. Department of Commerce, Bureau of Economic Analysis, Washington, D.C. The index most applicable to July 1 of each year.~~
- D. That one-half of total sewerage facility participation fees collected be placed into the Sewer Service Fund and used for payment toward the City's annual Metropolitan Sewerage System capacity charge. The remaining one-half of such fees collected shall be placed into a Trunk Sewer Capital Reserve Fund to pay for future expansion, improvements and rehabilitation of the City's trunk sewer system.
- E. That Council direct that the necessary ordinance be prepared to authorize collection of this fee.

## III. DEFINITIONS

Following are definitions of some of the terms used herein:

- A. Equivalent Dwelling Unit (EDU) - Unit of measure representing a dwelling unit or other structure generating sewage in a volume similar to that generated by a "typical" single family dwelling unit within the City. Sewage generation by a "typical" unit is recognized to be 265 gallons per day.
- B. Metro System (Metro) - San Diego Metropolitan Sewerage System including collection trunk sewers, pumping stations, treatment plant and ocean outfall.
- C. MGD - Million gallons per day.



- D. ENR Construction Cost Index - A running tabulation of relative nationwide construction industry costs published monthly by the Engineering News Record, a nationally distributed journal of construction trends and activities.

#### IV. DISCUSSION

##### A. Background

In 1961, the City Council committed the City to purchase 26.2 MGD in Metro system capacity. This commitment was based on a study of the City's projected sewerage needs conducted by Engineering-Science, Inc. in 1959. The total capacity reservation (26.2 MGD) was nearly ten times the actual total City flow (2.7 MGD) at that time.

Within the first few months after signing the Metro agreement the City transferred 4.1 MGD in capacity rights to Montgomery Sanitation District (4.0 MGD) and National City (0.1 MGD) to reduce its total holding of 22.1 MGD. That figure prevailed for many years until Council agreed in 1979, at the recommendation of the City Engineer, to consider sale of up to 5 MGD and thereby achieve a more realistic Metro reserve.

Since 1979 sales of 3.9 MGD have been consummated and sale of an additional 1.0 MGD to Spring Valley Sanitation District is currently in progress. When this latest sale is completed, the City will have a total remaining capacity reservation of 17.2 MGD, a current flow of approximately 9.0 MGD and an unused reserve of about 8.2 MGD.

Since joining Metro, the City has made annual payments to San Diego in the amount of \$12,098 for each MGD reserved. The initial annual capacity payment (for 26.1 MGD) was about \$317,000. The current (18.2 MGD) annual capacity payment is about \$220,000. Revenue for annual capacity payments is generated through sewer service charges. That system of charges also funds the City's proportionate share of Metro System maintenance and operation (M&O) costs which are based on actual current sewage flow generated within the City. Metro capacity charges to the City, conversely, are based on the total Metro capacity reserved by the City and are constant for any given capacity reservation. The sum of these two charges is the total amount paid in a given year by Chula Vista to San Diego.

Use of the sewer service charge to pay for both utilized capacity and reserve capacity rights in essence imposes a requirement that existing City residents subsidize the cost of reserve capacity for future City growth. Creation of a Sewerage Facility Participation Fee applicable to all new sewer connections is proposed as a means of recuperating much of that subsidized investment at the expense of those who will benefit most from the capacity thus reserved.

Additionally, it is proposed that such fee be utilized in part to create a fund to be pay for work upon the City's trunk sewer facilities to assure continuity of use, efficiency of utilization and/or adequacy of capacity.

The establishment of a Sewerage Facility Participation Fee will allow "new" residents to be charged for the benefit of having available the necessary Metro System and a trunk sewer system to serve general City



needs. If reserve Metro capacity had not been purchased, new residents would either not be permitted to build, or they would be required to pay for acquisition of additional treatment capacity. Instead, new residents are permitted to make use of the reserve capacity held by the City. That availability is a distinct asset in convenience, in cost and in time saved during the development process. It is, therefore, considered appropriate that new residents benefitting from that availability should bear its cost.

#### B. Other Area Agencies' Charges

Most agencies in the area between Poway and the International Border collect some form of fee intended to defray some portion of the cost of existing sewerage facilities. Those fees are sometimes part of a larger fee covering specific work involved in making a physical connection to sewer. Consequently, it is extremely difficult to compare the proposed City fee with those of other agencies. The City of San Diego staff recently compiled a list of what may be considered capacity charges by various County agencies. The following has been excerpted from that May 1984 list:

#### SINGLE FAMILY DOMESTIC CAPACITY CHARGES BY VARIOUS COUNTY AGENCIES

<u>COMMUNITY</u>	<u>ONE-TIME CAPACITY CHARGE</u>
Chula Vista	(300 proposed)
Coronado	850
Del Mar	200
El Cajon	195
Escondido	2,500
Fallbrook	2,700
Imperial Beach	--
La Mesa	600
Leucadia	1,500
National City	300
Oceanside	1,000
Otay M.W.D.	2,500
Padre Dam M.W.D.	185
Poway	1,500
Rainbow M.W.D.	1,741
Ramona	1,000
San Diego	774
San Diego County Sanitation Districts:	
Alpine	1,000
Buena	800
Cardiff	1,000
Fairbanks Ranch	--
Julian	1,500
Lakeside	1,000
Lemon Grove	1,000
Montgomery	1,000
Pine Valley	1,000
Rancho Santa Fe	1,000

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COMMUNITYONE-TIME CAPACITY CHARGE

Shadowridge	--
Solana Beach	1,000
Spring Valley	1,000
Whispering Palms	1,500
Wintergardens	1,000
San Marcos	2,400
Valley Center	2,955
Vista	1,650

**C. Pertinent Legislation**

Legislation (S.B. 1005, effective 1-1-82) requires that certain fees including those for sewer connections be limited so as not to exceed the estimated amount reasonably required to provide the service in question unless the amount charged in excess of such estimated amount is submitted to and approved by a popular vote of 2/3 of those electors voting on the issue. The bill requires that a public meeting at which oral or written presentations can be made be held prior to levying a new fee or service charge, and that the action be taken by ordinance or resolution.

Notice of the time and place of the meeting, including a general explanation of the matter to be considered is to be mailed at least 14 days prior to the meeting to any interested party who files a written request with the local agency for mailed notice on new or increased fees or service charges. (See Sections 54991 and 54992 of Chapter 13, division 2, Title 5 of the California Government Code.)

Since the fee recommended herein is an amount reasonably required to provide the service in question, it must be concluded that a simple public meeting will meet Government Code requirements.

**D. Use of Funds**

It is impractical to reimburse on an individual basis those residents who have to date purchased the available Metro reserve capacity held by the City. However, all residents could benefit through a reduction and/or stabilization of sewer service charges. This benefit could be accomplished through having a portion (suggest one-half) of the Sewerage Facility Participation Fee be applied toward payment of the City's annual capacity payment in the Metro System.

Dependent upon inflationary trends impacting Metro M&O costs such an application of Participation Fees would either reduce, stabilize or at least minimize future increases in Chula Vista's sewer service charge by reducing the balance of the City's annual capacity payment for its Metro System participation. Any of the named results would broadly benefit the residents of the City and in some measure "reimburse" for the previous expenditures for reserve capacity.

Another suggested use of a portion (suggest one-half) of the fee is toward payment for the work of repairing, replacing or enlarging trunk sewer facilities of the City. To this end, the creation of a Trunk Sewer Capital Reserve Fund is proposed for the express purpose of paying for the public participation portion of such work.



#### E. Preliminary Alternatives Considered

Engineering staff has examined the various City costs associated with making sewer service available to new developments. Of particular interest were those which might logically and equitably be used as a basis for the Sewerage Facility Participation Fee. Among the many agencies which now impose a capacity fee, most created their fee prior to Proposition 13, and, of those, many were apparently determined on a somewhat arbitrary basis. Such procedure would now likely be held unlawful. Consequently, Engineering staff has tried to isolate costs and create a system of fees based on fact so as to minimize any opportunity for legal challenge.

Among the sewer-related expenses investigated for viability were:

1. Cost of reserve Metro capacity.
2. Total Metro costs including both capacity and M&O expense.
3. Total cost of existing City sewer system.
4. Total cost of existing City trunk sewers.
5. Cost of "extra" capacity provided in City trunk sewers.
6. Cost of City participation in trunk sewer modifications.

All alternatives except items 1 and 6 were considered either inappropriate or were already the basis of a reimbursement charge. As a consequence of such preliminary investigation and elimination process, the study was concentrated on determining a fee which would be representative of the costs to provide adequacy of capacity in both the Metro System and the local trunk sewer system.

#### F. Alternative Methods of Determining the Cost of Metro Reserve Capacity

In order to determine the "cost" of Metro reserve capacity, it is first necessary to select an effective date for the computation. This comes about because the City makes annual payments towards Metro capacity and so the cumulative direct cost increases each year. For purposes of this study, costs are considered as fixed as of early 1984.

Approximately twenty-one annual capacity payments have been made as of February 1, 1984. While the total amount paid and the total capacity reserved have changed over the years, the annual payment per million gallons per day has remained constant (\$12,098 per year). It is this annual unit payment which we will utilize in determining an appropriate Sewerage Facility Participation Fee.



1. Alternative No. 1 (Investment, plus interest, plus overhead)

Assume that the annual payment (\$12,098) if invested could have earned an average return of 10%. (Note: 10% return verified by City Finance Officer re period 1963-1983.) If earnings for each year's investment are compounded for the appropriate total number of years and then added, the result will be the total cash amount which would currently be in the account. Additionally, there are expenses involved in collecting sewer service charges. Such expenses include postage, record keeping, management, etc. and are assumed herein to total 10% of the direct amount paid. (\$12,098 + \$1,210 = \$13,308) This sum is regarded herein as the direct annual cost per MGD.

Using Grant's "Principles of Engineering Economy" tables, the total value of such an investment (\$13,308) over a 21-year period can be determined.

Number of payments = 20.83 (as of 2-1-84)  
Interest rate = 10%  
Amount of payment = \$13,308  
Compound amount factor (F/A) = 62.858

$\$13,308 \times 62.858 = \$836,514$  = Compounded value of the investment  
for each 1 MGD in Metro capacity rights

3774 = Number of equivalent dwelling units (EDUs) which can be served  
by 1 MGD in capacity rights at the rate of 265 gallons per day  
per EDU.

$\frac{\$836,514}{3,774} = \$221.65$  = Compounded value of the investment for each EDU (2-1-84)

2. Alternative No. 2 (Replacement cost)

The Engineering News Record (ENR) magazine maintains running indexes of construction, building, labor and material costs. Indexes are given relative to similar costs in the base year 1913. By knowing the index for any two subsequent months, it is possible to express the percentage change in cost which occurred during the intervening time between the two specified months.

ENR construction cost index June 14, 1984 =	4,160
ENR construction cost index September 1963 =	<u>914</u>
Difference	3,246
% Increase	324.6%

Therefore, construction costs for similar work in June 1984 were 3.246 times those of September 1963. The recognized 1963 "annual cost" used herein is \$13,308 per MGD for Metro capacity rights. (See Alternative No. 1). As of February 1, 1984, the City has made 20.83 annual payments.



$3.246 \times \$13,308 \times 20.83 = \$899,810$  = Aggregate expense per MGD on an adjusted cost basis

3774 = Number of EDUs which can be served by 1 MGD in capacity rights

$\frac{\$899,810}{3,774} = \$238.42$  = Aggregate expense per EDU on adjusted cost basis (6-84)

G. Determination of the Cost for City Participation in Trunk Sewer Modifications

The first of the two factors considered appropriate as the basis of a sewage facility participation fee was "Cost of Metro Reserve Capacity." The second is the cost of City participation in trunk sewer modifications.

1. Assumptions Used

In order to estimate trunk sewer costs, it is necessary that a series of assumptions be made. Those made for this study are as follows:

- A. Work on trunk sewers comparable to that which has occurred during the last 20 years is likely to be necessary. This is the equivalent to the cost of building five miles of 12" sewer.
- B. The EDU count will increase in proportion to population and population will increase per the SANDAG Series 6 Projection.
- C. Work on trunk sewer modifications is likely to be funded entirely by public funds.

2. Estimate of Cost for Trunk Sewer Modifications:

- A. 37,900' of 12" sewer at \$37 per ft. = \$1,402,300
- B. 30% Engineering/Right-of-Way/Contingencies = 420,690
- TOTAL \$1,822,990

3. SANDAG Population Projection

Using the SANDAG Series 6 projection as a basis, Engineering staff had determined that the number of EDU's in the City would increase by approximately 27,050 units by 2003.

4. Cost per EDU for Trunk Sewers

$\frac{\$1,822,990}{27,050} = \$67.39$   
Total Cost (Projected New EDUs)



#### H. Total Cost Determination

The total cost to be reflected by the sewerage facility participating fee is the sum of the previously determined cost of Metro reserve capacity plus the cost of trunk sewer modification.

Metro Reserve Capacity (Alternate #1) =	221.65/EDU
Trunk Sewer Modification =	67.39/EDU

TOTAL (w/ Alt. #1)	289.04/EDU
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- or -

Metro Reserve Capacity (Alternate #2) =	238.42/EDU
City Participation in Future Trunks =	67.39/EDU

TOTAL (w/ Alt. #2)	305.81/EDU
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The above cost determinations are based in part upon actual known expenses, and in part upon best available information and/or estimates. Results should not be regarded as precise but instead as logical approximations of the amounts expended and/or projected on a per EDU basis for the purpose of assuring adequate Metro capacity and City-wide trunk sewer adequacy. The range of values obtained support the use of \$300 per EDU as an appropriate and justifiable sewerage facility participation fee.

#### I. Applicability of Fee

The basis of fees to be collected is proposed to be \$300 per EDU. Such amount is to be assessed proportionately against all new connections to the system and/or old connections from which permanent significantly greater sewage flow can reasonably be projected.

A table showing sewage generation rates in EDUs by the more common structure types is proposed to be prepared to facilitate simple and uniform fee determination. Sewage generation for land uses other than those shown in the table will be determined on the basis of the number of 265 gallon "units" projected to be generated. Thus, fees will be determined in all instances on the basis of sewage flow expressed in terms of EDUs.

A similar philosophy will be applied to existing connections to be modified in which a permanent significant increase in generation is projected. Such increase will similarly be charged on the basis of projected flow expressed in terms of EDUs, but only in those instances where the increase is projected to be at least the equivalent of one-half of one EDU.

#### J. Projected Income

Income will be totally dependent upon the rate of new construction in the City. During the period 1979-1983 an average of 273 EDUs per year were constructed. Such moderate growth, if continued, would generate approximately \$82,000 per year under the proposed fee structure.



The period 1976-1978 in contrast experienced an average growth rate of 1,015 EDUs per year which would generate an annual income of nearly \$305,000.

Future growth will likely fall between the figures cited.

#### V. SUMMARY/CONCLUSIONS

Twenty-one years ago, the City wisely elected to purchase sufficient Metro system capacity to accommodate its growth through the rest of the century. Subsequent to that time the citizenry has borne the cost of both utilized and reserve capacities via the sewer service charge. All growth within the City capitalizes on the availability of reserve capacity. It is appropriate and equitable that those who use the capacity so reserved pay for the privilege.

Experience has shown that both trunk and lateral sewers require repair, replacement or other modification in order to assure continuity of use, efficiency of utilization or adequacy of capacity. It is likely that such activities will continue and even increase in the future as the collective system gets older. It is appropriate that new members of the community share in the cost to keep the trunk sewer portion of the system functionally effective.

Engineering staff investigated a variety of costs upon which to base a sewerage facility participation fee. Most lacked a clearly definable relationship to the person or property seeking a new sewer connection. Others, such as segments of the existing City sewer system, have already been utilized as the basis of other fees (sewer reimbursements, etc.).

The "costs" for reserve Metro capacity and trunk sewer modifications were selected as being both justifiable and equitable for use as the basis of a sewerage facility participation fee. A fee of \$300 per EDU for all new construction is proposed for implementation.

It is suggested that income from the proposed Sewerage Facility Participation fee be divided equally between the Sewer Service Fund and a proposed Trunk Sewer Capital Reserve Fund.

Chula Vista is one of the few area agencies which does not now impose a capacity fee for sewerage facilities. The proposed fee is significantly lower than similar purpose fees typical for other agencies. In the opinion of Engineering staff, it has a sound basis, it is equitable, it is not likely to stimulate significant adverse public reaction, and it is capable of adoption without need of a City-wide election.

WPC 0882E



# ATTACHMENT 2

Table 1

CITY OF CHULA VISTA  
COST ALLOCATION  
Fiscal Year 1990-91

Assumed Flows (MGD)

Pre-Annex. Chula Vista 10.41  
Montgomery Area 2.36

	Flow Allocation		Suspended Solids Allocation		
	Percentage	Amount	Percentage	Amount	Total
<u>San Diego Metro Costs</u>					
Pre-Annexation Chula Vista Area					
Capital Projects					
Fixed Capacity Charges	74.0%	131,483	26.0%	46,197	177,679
CWP Upgrade Costs	74.0%	6,277,396	26.0%	2,205,572	8,482,967
CWP Upgrade Costs Reduced by Debt Service	74.0%	0	26.0%	0	0
CWP Proposed Debt Service	74.0%	0	26.0%	0	0
CWP Front Funding Payback	74.0%	(6,706,826)	26.0%	(2,356,452)	(9,063,278)
Metro I Betterment Costs	74.0%	320,701	26.0%	112,679	433,380
Internal Debt Service to Metro Sinking Fund	74.0%	782,180	26.0%	274,820	1,057,000
Subtotal--Capital	74.0%	804,934	26.0%	282,815	1,087,749
O & M Expenses	51.8%	1,083,692	48.2%	1,008,377	2,092,069
Subtotal--Metro Costs (Pre-Annexation CV)	59.4%	1,888,626	40.6%	1,291,192	3,179,818
Montgomery Area					
Capital Projects					
Fixed Capacity Charges	74.0%	29,837	26.0%	10,483	40,321
CWP Upgrade Costs	74.0%	1,424,524	26.0%	500,508	1,925,033
CWP Upgrade Costs Reduced by Debt Service	74.0%	0	26.0%	0	0
CWP Proposed Debt Service	74.0%	0	26.0%	0	0
CWP Front Funding Payback	74.0%	(1,521,974)	26.0%	(534,748)	(2,056,722)
Metro I Betterment Costs	74.0%	71,270	26.0%	25,041	96,311
Internal Debt Service to Metro Sinking Fund	74.0%	133,200	26.0%	46,800	180,000
Subtotal--Capital	74.0%	136,857	26.0%	48,085	184,942
O & M Expenses	51.8%	239,535	48.2%	222,887	462,422
Subtotal--Metro Costs (Montgomery Area)	58.1%	376,391	41.9%	270,972	647,364



Table 1

CITY OF CHULA VISTA  
COST ALLOCATION  
Fiscal Year 1990-91

Assumed Flows (MGD)

Pre-Annex. Chula Vista 10.41  
Montgomery Area 2.36

	Flow Allocation		Suspended Solids Allocation		Total
	Percentage	Amount	Percentage	Amount	
Combined Metro System Costs					
Capital Projects					
Fixed Capacity Charges	74.0%	161,320	26.0%	56,680	218,000
CWP Upgrade Costs	74.0%	7,701,920	26.0%	2,706,080	10,408,000
CWP Upgrade Costs Reduced by Debt Service	74.0%	0	26.0%	0	0
CWP Proposed Debt Service	74.0%	0	26.0%	0	0
CWP Front Funding Payback	74.0%	(8,228,800)	26.0%	(2,891,200)	(11,120,000)
Metro I Betterment Costs	74.0%	391,971	26.0%	137,719	529,690
Internal Debt Service to Metro Sinking Fund	74.0%	915,380	26.0%	321,620	1,237,000
Subtotal--Capital	68.7%	1,318,182	31.3%	601,872	1,920,054
O & M Expenses	51.8%	1,323,226	48.2%	1,231,265	2,554,491
Total--Metro Charges	59.0%	2,641,409	41.0%	1,833,136	4,474,545





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GENERAL INVOICE

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WITH PAYMENT

CITY OF CHULA VISTA  
DIVISION OF FINANCE  
P O BOX 1087  
CHULA VISTA CA 92012

ACCT NO  
000693

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DATE:  
BY: CA CK IF ED  
PAYMENT REF NO

AMT PAID:

INVOICE DATE  
04/23/02

PAYMENT DUE  
05/31/02

PERIOD COVERED

FOR INFORMATION CONCERNING YOUR BILLING CONTACT:

PEGGY MERINO REF NO:  
DEPT: METRO WASTEWATER - ADMIN 858 292 6322

DESCRIPTION OF CHARGES

AMOUNT

METROPOLITAN SEWERAGE SYSTEM

FY 2002 4TH QTR FUND 41509	3,470,646.00
FY 2001 YEAR-END ADJUSTMENT	918,148.00-
FY 2002 ESTIMATE ADJUSTMENT	918,148.00

ENCLOSURE TOTAL DUE 3,470,646.00  
NOTICE: PLEASE REMIT PAYMENT PROMPTLY. PAYMENT  
MUST BE RECEIVED BY THE DUE DATE LISTED ABOVE TO  
AVOID ADDITIONAL CHARGES. UNPAID BILLS WILL BE  
SUBJECT TO A COLLECTION FEE OF 10% OR \$10,  
WHICHEVER IS GREATER, INTEREST OF 1% PER MONTH  
ON THE UNPAID BALANCE, AND APPLICABLE PENALTIES.  
ANY QUESTIONS SHOULD BE DIRECTED TO THE CONTACT  
LISTED ABOVE. CUSTOMER COPY INV NO. 362287

Total Payment: \$13,882,584.00  
for FY 2002



CITY OF SAN DIEGO - METROPOLITAN WASTEWATER DEPARTMENT  
DISTRIBUTION OF SYSTEM WASTEWATER COSTS - FISCAL YEAR 2001  
FUNCTIONAL-DESIGN BASED ALLOCATION METHOD

ALLOCATION OF COSTS BY FLOW, SUSPENDED  
SOLIDS AND CHEMICAL OXYGEN DEMAND

AGENCY	FLOW (a)	SS (a)	COD (a)	TOTAL FLOW, SS & COD	TOTAL PAID FOR FY 2001	DIFFERENCE	% IN/DEC
CHULA VISTA	\$6,320,176	\$2,578,155	\$2,701,911	\$11,600,242	\$12,518,390	(\$918,148)	-7.33%
CORONADO	\$1,000,092	\$301,698	\$348,734	\$1,650,524	\$1,802,500	(\$151,976)	-8.43%
DEL MAR	\$301,917	\$160,097	\$118,099	\$578,113	\$617,358	(\$39,243)	-6.36%
EL CAJON	\$3,671,562	\$1,548,114	\$1,382,584	\$6,602,260	\$7,679,352	(\$977,092)	-12.89%
IMPERIAL BEACH	\$900,413	\$372,488	\$350,743	\$1,623,642	\$1,853,788	(\$230,126)	-12.41%
LA MESA	\$1,986,699	\$692,736	\$657,333	\$3,336,768	\$3,803,512	(\$466,744)	-14.52%
LAKESIDE/ALPINE	\$1,348,474	\$601,736	\$485,701	\$2,413,911	\$2,824,838	(\$410,925)	-14.55%
LEMON GROVE	\$1,058,640	\$384,098	\$397,178	\$1,820,825	\$2,064,258	(\$243,331)	-11.38%
NATIONAL CITY	\$2,165,792	\$920,118	\$927,492	\$4,013,402	\$4,584,684	(\$551,182)	-12.07%
OTAY	\$210,428	\$342,448	\$182,291	\$735,167	\$593,824	\$141,343	23.50%
PADRE DAM	\$1,379,352	\$1,378,085	\$843,857	\$3,601,284	\$3,773,800	(\$172,508)	-4.57%
POWAY	\$1,580,189	\$576,661	\$455,114	\$2,611,974	\$3,246,996	(\$635,022)	-19.56%
SPRING VALLEY	\$2,415,371	\$863,675	\$878,340	\$4,255,386	\$5,150,748	(\$895,362)	-17.38%
WINTERGARDENS	\$388,615	\$122,793	\$103,683	\$595,091	\$710,028	(\$114,937)	-16.19%
SUBTOTAL PARTICIPATING AGENCIES	\$24,708,738	\$10,922,900	\$9,809,081	\$45,438,699	\$51,183,930	(\$5,755,231)	-11.24%
SAN DIEGO	\$51,113,813	\$27,080,924	\$24,982,948	\$103,137,683			
TOTAL	\$75,820,551	\$37,983,824	\$34,772,007	\$148,578,382			



METROPOLITAN WATERWATER DEPARTMENT  
 FLOW IN MILLION GALLONS PER YEAR (MGD) AND MILLION GALLONS PER DAY (MGD)  
 FOR THE FISCAL YEARS 1967 THROUGH 1998

ACTUAL FLOWS:	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
CHULA VISTA (1)	2,627,006	7,167	2,757,343	7,833	2,778,918	8,901	2,654,739	8,999	2,551,717	8,543	1,962,874	7,906	2,094,396	7,150	1,689,444	5,906	2,249,107	8,874	3,400,297	8,454												
CORONADO	1,028,516	2,912	850,873	2,449	741,801	2,032	734,863	1,846	805,200	2,398	805,200	2,398	805,200	2,398	805,200	2,398	805,200	2,398	805,200	2,398												
DEL MAR	251,344	0.234	228,157	0.228	287,524	0.734	294,843	0.808	287,310	0.732	241,168	0.844	254,347	0.708	243,037	0.844	244,178	0.844	244,178	0.844												
EL CAJON	2,214,167	8,328	2,343,064	8,134	2,131,514	8,582	2,043,368	8,344	2,792,791	7,881	2,088,148	7,881	2,344,329	8,108	2,324,184	7,716	2,916,899	7,884	2,944,831	8,186												
IMPERIAL BEACH	1,161,300	3,197	1,021,863	2,796	1,020,340	2,784	944,428	2,846	1,012,844	2,828	918,484	2,812	934,339	2,826	841,023	2,308	910,208	2,826	910,208	2,826												
LA MESA	1,968,843	6,348	2,911,779	6,487	1,991,177	6,448	1,972,282	6,446	1,924,244	6,406	1,882,342	6,352	1,741,796	6,272	1,681,048	5,882	1,924,987	6,272	1,741,796	6,272												
LAVERGNE	1,008,242	2,847	1,170,128	3,197	1,008,218	2,915	1,235,404	3,287	903,710	2,488	942,807	2,412	897,482	2,728	1,014,022	2,790	1,140,306	3,141	1,270,848	3,472												
LEMON GROVE	788,864	2,108	817,873	2,334	783,843	2,082	782,865	2,082	878,346	1,888	823,818	1,728	898,119	1,828	841,006	1,821	894,139	1,821	894,139	1,821												
MONTGOMERY (1)	1,233,086	3,378	1,357,882	3,709	1,498,058	4,017	1,498,058	3,849	1,381,271	3,819	1,187,894	3,348	1,304,179	3,378	1,278,248	3,407	1,304,179	3,378	1,278,248	3,378												
NATIONAL CITY	1,323,544	3,243	1,418,848	3,349	1,418,848	3,349	1,418,848	3,349	1,418,848	3,349	1,418,848	3,349	1,418,848	3,349	1,418,848	3,349	1,418,848	3,349	1,418,848	3,349												
PADRE DAM	347,843	0.843	481,874	1,183	328,386	0,942	378,328	0,942	344,164	0,737	288,338	0,664	371,851	0,678	323,743	0,527	344,164	0,678	323,743	0,678												
POWAY	1,288,194	4,444	1,254,087	4,164	1,489,886	3,874	1,664,987	4,123	1,487,896	4,074	1,448,748	3,848	1,602,887	4,308	1,448,748	3,848	1,602,887	4,308	1,448,748	3,848												
SPRING VALLEY	1,238,178	3,396	1,298,300	3,848	1,281,881	3,704	1,281,185	3,748	1,282,110	3,814	1,282,868	3,844	1,474,183	4,038	1,172,270	3,312	1,100,886	3,878	1,066,899	3,878												
WINTERGARDENS	3,238,790	8,408	2,348,346	8,878	2,574,448	8,793	2,647,787	8,559	2,602,214	8,378	2,628,358	7,883	2,648,868	8,408	2,648,868	8,408	2,648,868	8,408	2,648,868	8,408												
WINTERGARDENS	247,282	0.853	312,421	1,020	287,681	1,007	274,028	1,026	248,351	0,868	203,554	0,828	283,481	0,809	282,025	0,819	348,867	0,864	318,006	0,872												
AGENCY SUBTOTAL	21,464,310	58,778	21,827,480	59,811	21,338,728	58,440	20,788,841	56,731	19,278,188	52,798	18,111,375	48,446	20,080,862	55,016	18,110,840	42,869	19,724,726	54,008	18,114,842	52,227												
SAN DIEGO	42,338,062	118,716	44,817,760	121,806	45,828,441	134,868	44,788,801	133,879	45,449,871	134,798	46,033,278	135,774	44,880,719	133,388	45,842,370	123,406	44,801,445	133,324	44,847,868	127,890												
TOTAL	63,802,372	174,494	66,645,240	181,616	66,667,149	183,308	65,577,642	180,610	64,818,049	177,896	64,144,840	175,250	64,771,540	168,418	64,103,810	176,274	64,526,340	162,391	65,692,811	160,228												

(1) Montgomey is scheduled in the Chula Vista flow in fiscal year 1998

x Chula Vista - (Dated 6/1/99) - 6.999  
 x Chula Vista (Montgomey) - 3.978  
 x Chula Vista (Port of Spring Valley) - (2.313)  
 x Chula Vista (approx x)  
 Total 1998 flow = 19.31 MGD



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# ATTACHMENT 3

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Construction Economics

## Construction Cost Index History

### Construction Cost Index History (1908-2002)

HOW ENR BUILDS THE INDEX: 200 hours of common labor at the 20-city average of common labor rates, plus 25 cwt of standard structural steel shapes at the mill price prior to 1996 and the fabricated 20-city price from 1996, plus 1.128 tons of portland cement at the 20-city price, plus 1,088 board-ft of 2 x 4 lumber at the 20-city price.

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVG	In
1980	3132	3134	3159	3143	3139	3198	3260	3304	3319	3327	3355	3376	3237	
1981	3372	3373	3384	3450	3471	3496	3548	3616	3657	3660	3697	3695	3535	
1982	3704	3728	3721	3731	3734	3815	3899	3899	3902	3901	3917	3950	3825	
1983	3960	4001	4006	4001	4003	4073	4108	4132	4142	4127	4133	4110	4066	
1984	4109	4113	4118	4132	4142	4161	4166	4169	4176	4161	4158	4144	4146	
1985	4145	4153	4151	4150	4171	4201	4220	4230	4229	4228	4231	4228	4195	
1986	4218	4230	4231	4242	4275	4303	4332	4334	4335	4344	4342	4351	4295	
1987	4354	4352	4359	4363	4369	4387	4404	4443	4456	4459	4453	4478	4406	
1988	4470	4473	4484	4489	4493	4525	4532	4542	4535	4555	4567	4568	4519	
1989	4580	4573	4574	4577	4578	4599	4608	4618	4658	4658	4668	4685	4615	

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVG	
1990	4680	4685	4691	4693	4707	4732	4734	4752	4774	4771	4787	4777	4732	
1991	4777	4773	4772	4766	4801	4818	4854	4892	4891	4892	4896	4889	4835	
1992	4888	4884	4927	4946	4965	4973	4992	5032	5042	5052	5058	5059	4985	
1993	5071	5070	5106	5167	5262	5260	5252	5230	5255	5264	5278	5310	5210	
1994	5336	5371	5381	5405	5405	5408	5409	5424	5437	5437	5439	5439	5408	
1995	5443	5444	5435	5432	5433	5432	5484	5506	5491	5511	5519	5524	5471	
1996	5523	5532	5537	5550	5572	5597	5617	5652	5683	5719	5740	5744	5620	
1997	5765	5769	5759	5799	5837	5860	5863	5854	5851	5848	5838	5858	5825	
1998	5852	5874	5875	5883	5881	5895	5921	5929	5963	5986	5995	5991	5920	
1999	6000	5992	5986	6008	6006	6039	6076	6091	6128	6134	6127	6127	6060	

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVG	
2000	6130	6160	6202	6201	6233	6238	6225	6233	6224	6259	6266	6283	6221	
2001	6281	6273	6280	6286	6288	6319	6404	6389	6391	6397	6410	6390	6342	
2002	6462	6462	6502	6480	6512	6532	6605	6592	6589	6579	6578	6563		

Base: 1913=100

#### ANNUAL AVERAGE

1908	97	1931	181	1954	628	1977	2576
1909	91	1932	157	1955	660	1978	2776
1910	96	1933	170	1956	692	1979	3003

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1912	91	1935	196	1958	759
1913	100	1936	206	1959	797
1914	89	1937	235	1960	824
1915	93	1938	236	1961	847
1916	130	1939	236	1962	872
1917	181	1940	242	1963	901
1918	189	1941	258	1964	936
1919	198	1942	276	1965	971
1920	251	1943	290	1966	1019
1921	202	1944	299	1967	1074
1922	174	1945	308	1968	1155
1923	214	1946	346	1969	1269
1924	215	1947	413	1970	1381
1925	207	1948	461	1971	1581
1926	208	1949	477	1972	1753
1927	206	1950	510	1973	1895
1928	207	1951	543	1974	2020
1929	207	1952	569	1975	2212
1930	203	1953	600	1976	2401

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March 5, 2003



Mr. Cliff Swanson  
Director of Engineering  
City of Chula Vista  
276 Fourth Avenue  
Chula Vista, CA 91910

**SUBJECT: INTERIM INCREASE TO THE SEWERAGE CAPACITY CHARGE**

Dear Mr. Swanson:

As a portion of the wastewater rate study that is currently under way, we have completed our preliminary review of your current Sewerage Capacity Charge.

Based on this initial effort, we determined that in March of 1985, your Public Works Department prepared a Study titled "*Sewerage Facility Participation Fee Study-Modified March 1985.*" The purpose of that study was to investigate the feasibility of establishing a capacity fee that would be applicable to all new sewer connections to the City's sewer collection system. The study recommended amongst other things, the establishment of a Sewerage Participation fee that would be adjusted on an annual basis to reflect changes in construction costs (suggested basis - Engineering News Record Construction Cost Index (ENR-CCI) most applicable to July 1 of each year).

Your capacity fee was updated several times between 1985 and 1990 based on several studies. On October 9, 1990, the City of Chula Vista City Council increased the Sewerage Capacity Charge to \$2,220 to enable the City to meet its obligation to the Metro System for the upgrade of the Point Loma treatment plant. The Resolution further recommended that the Sewerage Capacity Charge be increased annually by 11 percent for a period of 8 to 10 years thereafter. This recommendation was made in anticipation of future expenditures that may be incurred by the Metro system in the process of complying with EPA regulations.

Since then, this was not done due to a variety of reasons even though the original study which established the fee and subsequent Council actions had recommended that the City update the fee annually to reflect the increase in capacity, improvements, maintenance and operation costs.

During the course of our analysis, we reviewed the changes in the ENR-CCI since the last time the City adjusted their capacity fees in 1990. Since that time, the ENR-CCI has increased by 1.5 percent. This means that the City's capacity charge has current buying dollars of approximately \$1,500. The 1.5 percent increase in the ENR CCI-LA is substantially less than the 11 percent per year adjustment included in the 1990 Ordinance.

3-26



Mr. Cliff Swanson  
March 5, 2003  
Page 2 of 2

We are in the process of developing new City of San Diego Metro Costs (as part of the consulting work we do for the Metro Technical Advisory Committee) as well as the City of Chula Vista's Wastewater Master Plan Update, which currently scheduled to be completed by the end of the year. The Wastewater Master Plan will include a comprehensive review of the Sewerage Capacity Charge and will include a recommendation for an update of the Sewerage Capacity Charge to cover the additional Metro and local costs.

Based on the preliminary analysis completed to date, we are in the interim recommending that the City of Chula Vista update their existing capacity fee of \$2,220 to \$3,000 to bring the fee to present value. This will allow the City to recover their existing costs on a current dollar basis, pending the completion of the Wastewater Master Plan.

If you have any questions, please call me at (760) 753-1120 Ext. 427.

Sincerely,



Karyn L. Keese  
Client Financial Services Manager

KLK:mac

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PBS



ORDINANCE NO.

AN ORDINANCE OF THE CITY OF CHULA VISTA  
APPROVING AN INCREASE OF THE SEWERAGE  
CAPACITY CHARGE AND THE MODIFICATION  
OF THE MASTER FEE SCHEDULE

WHEREAS, in March of 1985, the Engineering Department prepared a Study titled "*Sewerage Facility Participation Fee Study-Modified March 1985*". The purpose of this study was to investigate the feasibility of establishing a capacity fee that would be applicable to all new sewer connections to the City's sewer collection system; and,

WHEREAS, upon completion, this study recommended among other things, the establishment of a Sewerage Capacity Charge that would be adjusted on an annual basis to reflect changes in construction costs (suggested basis: Engineering News Record Construction Index most applicable to July 1 of each year); and,

WHEREAS, on April 2, 1985, City Council by Ordinance 2107, approved the establishment of the Sewerage Facility Participation Fee, now referred to as the Sewerage Capacity Charge, to enable the citizenry to be repaid for their initial investment and to facilitate the development of Chula Vista. At that time, the fee was set to be \$300 per Equivalent Dwelling Unit (EDU); and,

WHEREAS, the City of Chula Vista along with fourteen other agencies that belong to the Metro System sends its flow to the City of San Diego's Point Loma Wastewater Treatment Plant for handling of the sewage; and,

WHEREAS, in anticipation of the significant costs of upgrading the Point Loma Wastewater Treatment Plant to a secondary treatment facility, for which the City of Chula Vista as well as other participating agencies was liable, Council on May 5, 1987, approved Resolution No. 13004 and Ordinance No. 2002 increasing the Sewerage Capacity Charge from \$300 to \$600; and,

WHEREAS, in 1989 following the adoption of the Clean Water Act, the Environmental Protection Agency (EPA) directed the City of San Diego to upgrade the Plant to a Secondary Treatment facility. Since Federal funds were not anticipated to be available for the required upgrades at that time and the cost of bringing the Plant into compliance seemed to be far greater than what was originally anticipated in 1987, Council on October 17, 1989 approved Resolution Nos. 15352 and 15352A. These Resolutions increased the Sewerage Capacity Charge to \$2,000, pending the completion of various studies being conducted at that time to determine the impact of upgrading the treatment plant; and,



**WHEREAS**, in October 9, 1990, Council by Resolution 15894 further increased the Sewer Participation Fee to \$2,220 to enable the City meet its obligation to the Metro System for the upgrade of the treatment plant; and,

**WHEREAS**, the City has not adjusted the Sewerage Capacity Charge since 1990, even though Metro's costs for the provision of sewage capacity and treatment services have been increasing annually for the past twelve years. In addition, no adjustments had been done to this charge to keep up with inflation as originally intended at the inception of the fee; and,

**WHEREAS**, Chula Vista currently has capacity rights in the Metro Sewer System to cover growth for the next few years. This capacity was acquired with funds generated by the Sewerage Capacity Charge that existing residents paid when they made their connection to the City's sewer system. If reserved capacity in the Metro Sewer System had not been purchased, new residents would either have not been permitted to build, or would have been required to pay for the acquisition of additional treatment capacity. Instead, new residents are permitted to make use of the reserved capacity held by the City; and,

**WHEREAS**, the increase in the Sewerage Capacity Charge, applicable to all new sewer connections, is proposed as a mean of recuperating the cost of reserve capacity and also maintain a fund that will fund the acquisition of additional capacity and subsidize the cost of the necessary sewer improvements that will benefit all City residents; and,

**WHEREAS**, The City recently retained PBS&J to update the City's Wastewater Master Plan with the primary goal of evaluating the adequacy of the existing wastewater collection system to sustain the long-term growth of the City. The plan will also assist the City in: budgeting for Capital Improvement Projects (CIP), allocating resources for the acquisition of additional sewage capacity and determining the short and long-term sewer capacity needs of the City. Since the Master Plan is scheduled to be completed by Fall 2003, the consultant is advising the City to implement one of the recommendations made in the 1984, Sewerage Facility Participation Fee Study, which is to adjust the Sewerage Capacity Charge to reflect the changes in construction costs, based on the Engineering News Record Construction Cost Index (ENR CCI). This increase will be needed to keep up with inflation while the consultant makes its final recommendation; and,

**WHEREAS**, the ENR CCI is a monthly composite figure of the cost of various construction material and labor costs as measured by the Engineering News Record Magazine. As such, the City's consultant and staff believe that it is a more accurate predictor of the effects of inflation on a typical construction project than the CPI or other measure of inflation. Utilizing the ENR CCI for July 1990 and for July 2002 as the basis of the increase, the Sewerage Capacity Charge will be increased from \$2,220 per Equivalent Dwelling Unit to \$3,000 per Equivalent Dwelling Unit; and,



WHEREAS, the City Council has determined that the amount of the fee levied by this Ordinance does not exceed the estimated cost of providing the public facilities.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF CHULA VISTA DOES ORDAIN AS FOLLOWS:

SECTION I: That the Chapter XII Engineering – Sewer, Section 3(a) of part A of the Master Fee Schedule be, and the same is hereby amended to read as follows:

“3. Sewerage Capacity Charge

- a. The owner or person making application for a permit to develop or modify use of any residential, commercial, industrial or other property which is projected by the City Engineer to increase the volume of flow in the City sewer system by at least one-half of one Equivalent Dwelling Unit of flow shall pay a sewerage facility participation fee Sewerage Capacity Charge. The base charge is hereby established as ~~\$2,220~~ \$3,000 per Equivalent Dwelling Unit of flow.”

SECTION II: CEQA Findings for Statutory Exemption.

The City Council does hereby find that the Sewerage Capacity Charge herein imposed is for the purpose of obtaining funds for capital projects necessary to maintain service within existing service areas. Therefore, the City finds that the adoption of this Ordinance is statutorily exempt under the provisions of CEQA Guidelines Section 15060(c)(3).

SECTION III: Findings

The City Council finds that the collection of the Sewerage Capacity Charge, established by Ordinance No. 2107, at the time the building permit is issued is necessary. This will ensure that funds will be available for the acquisition of capacity rights in the Metro System, construct improvements to enhance capacity in the City's sewer system and to pay for the treatment of sewage; and,



The City Council finds that developers of land within the City should be required to mitigate the burden created by development through the payment of a fee to finance a development's appropriate portion of the total cost of the sewer improvements, sewage treatment and capacity rights in the Metro System; and,

The City Council finds that the legislative findings and determinations set forth in the Ordinance referred to in the above recitals continue to be true and correct; and,

The City Council finds, after consideration of the evidence presented to it, that the increase of the Sewerage Capacity Charge is necessary in order to assure adequate sewer service to the City; and,

The City Council finds, based on the evidence presented at the meeting and the information received by the City Council in the ordinary course of its business, that the imposition of the Sewerage Capacity Charge on all future developments in the City for which building permits have not been issued is necessary in order to protect the public health, safety and welfare; and,

The City Council finds that the amount of the amended fee levied by this Ordinance does not exceed the estimated cost of providing the sewer service to the developments within the City; and,

The City Council finds that it is appropriate to approve an increase to the Sewerage Capacity Charge to reflect: the acquisition of additional capacity rights; the annual increase in the Metropolitan Sewerage System Costs; the increase in the need for improvements created by the demand for more capacity in the sewer system; and,

The City Council finds it is necessary to ensure sewer capacity in the Metro system before the reserved capacity is exhausted and to ensure the timely payment to adequately fund ongoing and future sewer improvements to enhance capacity in the City's sewer system triggered by future development.



**SECTION IV:** Time Limit for Protest and Judicial Action.

Any judicial action or proceeding to attack, review, set aside, void or annul this Ordinance shall be brought within the period as established by law.

In accordance with Government Code Section 66020(d)(1), the ninety-day approval period in which parties may protest beginning upon the effective date of this Ordinance.


**SECTION V:** Effective Date.

This Ordinance shall become effective sixty (60) days after its second reading and adoption.

Presented by:

Approved as to form by:

Clifford L. Swanson  
Director of Engineering

  
Ann Moore  
City Attorney



ORDINANCE NO.

AN URGENCY ORDINANCE OF THE CITY OF  
CHULA VISTA APPROVING AN INCREASE OF  
THE SEWERAGE CAPACITY CHARGE AND THE  
MODIFICATION OF THE MASTER FEE  
SCHEDULE

WHEREAS, in March of 1985, the Engineering Department prepared a Study titled "*Sewerage Facility Participation Fee Study-Modified March 1985*". The purpose of this study was to investigate the feasibility of establishing a capacity fee that would be applicable to all new sewer connections to the City's sewer collection system; and,

WHEREAS, upon completion, this study recommended among other things, the establishment of a Sewerage Capacity Charge that would be adjusted on an annual basis to reflect changes in construction costs (suggested basis: Engineering News Record Construction Index most applicable to July 1 of each year); and,

WHEREAS, on April 2, 1985, City Council by Ordinance 2107, approved the establishment of the Sewerage Facility Participation Fee, now referred to as the Sewerage Capacity Charge, to enable the citizenry to be repaid for their initial investment and to facilitate the development of Chula Vista. At that time, the fee was set to be \$300 per Equivalent Dwelling Unit (EDU); and,

WHEREAS, the City of Chula Vista along with fourteen other agencies that belong to the Metro System sends its flow to the City of San Diego's Point Loma Wastewater Treatment Plant for handling of the sewage; and,

WHEREAS, in anticipation of the significant costs of upgrading the Point Loma Wastewater Treatment Plant to a secondary treatment facility, for which the City of Chula Vista as well as other participating agencies was liable, Council on May 5, 1987, approved Resolution No. 13004 and Ordinance No. 2002 increasing the Sewerage Capacity Charge from \$300 to \$600; and,

WHEREAS, in 1989 following the adoption of the Clean Water Act, the Environmental Protection Agency (EPA) directed the City of San Diego to upgrade the Plant to a Secondary Treatment facility. Since Federal funds were not anticipated to be available for the required upgrades at that time and the cost of bringing the Plant into compliance seemed to be far greater than what was originally anticipated in 1987, Council on October 17, 1989 approved Resolution Nos. 15352 and 15352A. These Resolutions increased the Sewerage Capacity Charge to \$2,000, pending the completion of various studies being conducted at that time to determine the impact of upgrading the treatment plant; and,



**WHEREAS**, in October 9, 1990, Council by Resolution 15894 further increased the Sewer Participation Fee to \$2,220 to enable the City meet its obligation to the Metro System for the upgrade of the treatment plant; and,

**WHEREAS**, the City has not adjusted the Sewerage Capacity Charge since 1990, even though Metro's costs for the provision of sewage capacity and treatment services have been increasing annually for the past twelve years. In addition, no adjustments had been done to this charge to keep up with inflation as originally intended at the inception of the fee; and,

**WHEREAS**, Chula Vista currently has capacity rights in the Metro Sewer System to cover growth for the next few years. This capacity was acquired with funds generated by the Sewerage Capacity Charge that existing residents paid when they made their connection to the City's sewer system. If reserved capacity in the Metro Sewer System had not been purchased, new residents would either have not been permitted to build, or would have been required to pay for the acquisition of additional treatment capacity. Instead, new residents are permitted to make use of the reserved capacity held by the City; and,

**WHEREAS**, the increase in the Sewerage Capacity Charge, applicable to all new sewer connections, is proposed as a mean of recuperating the cost of reserve capacity and also maintain a fund that will fund the acquisition of additional capacity and subsidize the cost of the necessary sewer improvements that will benefit all City residents; and,

**WHEREAS**, The City recently retained PBS&J to update the City's Wastewater Master Plan with the primary goal of evaluating the adequacy of the existing wastewater collection system to sustain the long-term growth of the City. The plan will also assist the City in: budgeting for Capital Improvement Projects (CIP), allocating resources for the acquisition of additional sewage capacity and determining the short and long-term sewer capacity needs of the City. Since the Master Plan is scheduled to be completed by Fall 2003, the consultant is advising the City to implement one of the recommendations made in the 1984, Sewerage Facility Participation Fee Study, which is to adjust the Sewerage Capacity Charge to reflect the changes in construction costs, based on the Engineering News Record Construction Cost Index (ENR CCI). This increase will be needed to keep up with inflation while the consultant makes its final recommendation; and,

**WHEREAS**, the ENR CCI is a monthly composite figure of the cost of various construction material and labor costs as measured by the Engineering News Record Magazine. As such, the City's consultant and staff believe that it is a more accurate predictor of the effects of inflation on a typical construction project than the CPI or other measure of inflation. Utilizing the ENR CCI for July 1990 and for July 2002 as the basis of the increase, the Sewerage Capacity Charge will be increased from \$2,220 per Equivalent Dwelling Unit to \$3,000 per Equivalent Dwelling Unit; and,



**WHEREAS**, the City Council has determined that the amount of the fee levied by this Ordinance does not exceed the estimated cost of providing the public facilities.

**WHEREAS**, the City Council is placing an Ordinance on its first reading which will increase the Sewerage Capacity Charge and modify the Master Fee Schedule; and,

**WHEREAS**, the fees modified by that Ordinance will not become effective until sixty (60) days after its second reading; and,

**WHEREAS**, developers in the City will be applying for building permits during the interim period before the increased Sewerage Capacity Charge becomes effective; and,

**WHEREAS**, Government Code Section 66017(b) authorizes the City to adopt a fee as an urgency measure upon making a finding describing the current and immediate threat to the public health, welfare and safety; and,

**WHEREAS**, said easure will be effective for thirty (30) days and may be extended for additional thirty (30) day periods upon subsequent action by the City Council; and,

**WHEREAS**, the Environmental Review Coordinator has reviewed the proposed activity for compliance with the California Environmental Quality Act (CEQA) and has determined that the activity is not a "Project" as defined under Section 15378 of the State CEQA Guidelines; therefore, pursuant to Section 15060(c)(3) of the State CEQA Guidelines, the activity is not subject to CEQA. Thus, no environmental review is necessary; and,

**WHEREAS**, state law requires said Urgency Ordinance to be adopted by a four-fifths vote.

**NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF CHULA VISTA DOES ORDAIN AS FOLLOWS:**

**SECTION I:** Finding of Urgency

The City Council of the City of Chula Vista finds that it is necessary that the Sewerage Capacity Charge be increased and the Master Fee Schedule modified and the increase go into effect immediately. The increase is needed in order to require all developments to pay their fair share of the cost of: acquiring additional sewer capacity, paying for sewage treatment and the construction of improvements needed to enhance the capacity of



the City's sewer system, and all other related eligible expenditures resulting from the impacts caused by their developments.

Immediate implementation of this fee is necessary due to the current and immediate threat to public safety. Should there be a shortfall in the funds necessary to pay for additional sewage treatment capacity and the needed sewer improvements, it could result in the failure of the existing sewage collection system and sewage spills.

The City Council finds that the prospect of a deficit, not enough sewer capacity to serve the growing population, the failure of old sewer infrastructure and concerns about an increased charge to remaining property owners, constitutes a current immediate threat to the public health, welfare and safety justifying the immediate imposition of this fee.

**SECTION II:**

That the Chapter XII Engineering – Sewer, Section 3(a) of part A of the Master Fee Schedule be, and the same is hereby amended to read as follows:

**"3. Sewerage Capacity Charge**

- a. The owner or person making application for a permit to develop or modify use of any residential, commercial, industrial or other property which is projected by the City Engineer to increase the volume of flow in the City sewer system by at least one-half of one Equivalent Dwelling Unit of flow shall pay a sewerage facility participation fee Sewerage Capacity Charge. The base charge is hereby established as ~~\$2,220~~ \$3,000 per Equivalent Dwelling Unit of flow."

**SECTION III:**

**CEQA Findings for Statutory Exemption.**

The City Council does hereby find that the Sewerage Capacity Charge herein imposed is for the purpose of obtaining funds for capital projects necessary to maintain service within existing service areas. Therefore, the City finds that the adoption of this Ordinance is statutorily exempt under the provisions of CEQA Guidelines Section 15060(c)(3).

**SECTION IV:**

**Findings**



The City Council finds that the collection of the Sewerage Capacity Charge, established by Ordinance No. 2107, at the time the building permit is issued is necessary. This will ensure that funds will be available for the acquisition of capacity rights in the Metro System, construct improvements to enhance capacity in the City's sewer system and to pay for the treatment of sewage; and,

The City Council finds that developers of land within the City should be required to mitigate the burden created by development through the payment of a fee to finance a development's appropriate portion of the total cost of the sewer improvements, sewage treatment and capacity rights in the Metro System; and,

The City Council finds that the legislative findings and determinations set forth in the Ordinance referred in the recitals set forth above, continue to be true and correct; and,

The City Council finds, after consideration of the evidence presented to it, that the increase of the Sewerage Capacity Charge is necessary in order to assure adequate sewer service to the City; and,

The City Council finds, based on the evidence presented at the meeting and the information received by the City Council in the ordinary course of its business, that the imposition of the Sewerage Capacity Charge on all future developments in the City for which building permits have not been issued is necessary in order to protect the public health, safety and welfare; and,

The City Council finds that the amount of the amended fee levied by this Ordinance does not exceed the estimated cost of providing the sewer service to the developments within the City; and,

The City Council finds that it is appropriate to approve an increase to the Sewerage Capacity Charge to reflect: the acquisition of additional capacity rights; the annual increase in the Metropolitan Sewerage System Costs; the increase in the need for improvements created by the demand for more capacity in the sewer system; and,

The City Council finds it is necessary to ensure sewer capacity in the Metro system before the reserved capacity is exhausted and to ensure the timely payment to adequately fund ongoing and future sewer improvements to enhance capacity in the City's sewer system triggered by future development.